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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,177	02/02/2001	Michel Droux	201975US3PCT	8607

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EXAMINER

YAO, SAM CHAUN CUA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-7

Office Action Summary

Application No.

09/774,177

Applicant(s)

DROUX, MICHEL

Examiner

Sam Chuan C. Yao

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-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group III (claims 17-21) in Paper No. 7 is acknowledged. The traversal is on the ground(s) that *"the cited references destroy the single inventive concept as these documents belong to other technical fields."* (emphasis added). This is not found persuasive because Examiner's strongly disagrees with Counsel's assertion that the references cited belong to other technical fields. The claims as presently recited merely require forming a fiber mat and/or a fiber composite. The fiber mat and/or fiber composite reads on a fiber web/mat or a fiber composite laminated web taught by Neveu et al or Pike et al.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 is indefinite because it is unclear what is intended by the limitation *"capable of being obtained according to the process of claim 1"*. Does claim 17 require forming a mat by the process of claim 1 or not? What is intended by the term *"filament"*? Is this term intended to define over staple fibers (i.e. short fibers) or chopped strands? Is

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so, is there any difference between "*continuous strands*" recited in claim 20 and "*filaments*" recited in this claim?

Claim 18 is indefinite because it is unclear what is intended by the phrase "*filament dispersion gradient*"? Is this a term of the art? Is it intended to require a filament mat being "*partly opened*"? Is so, this limitation would appear to be redundant.

Claim 19 is indefinite because it is unclear which "*strands*" is being referred to in this claim. Is it the "*one or more layer (layers) of integrated strand(s)*", "*one or more layer (layers) of strand(s) at least partly opened*", or both? Moreover, a broad range or limitation followed by linking terms (e.g., **preferably**, maybe, for instance, especially) and a narrow range or limitation within the broad range or limitation also renders this claim indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

Claim 20 is indefinite because it is unclear which "*strands*" is being referred to in this claim. Moreover, it is also unclear what is intended by the phrase "*continuous strands*"? Is there any difference between a filament and a continuous strand?

Claim 21 is indefinite because it is unclear whether this claim requires at least reinforcing strands in addition to an organic material and/or inorganic material? Equally important, the phrase "*at least one organic material and/or one inorganic material*" is confusing.

The presently claims are replete with 112 2nd paragraph problems making examination of these claims extremely difficult to follow. It is suggested to amend

these claims to conform to US drafting practice. These claims will be examined as best understood by the Examiner.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Pike et al (US 6,352,948).

Pike et al discloses a process of making a laminated composite fiber web, the process comprises forming continuous filaments (52) using a spinneret, depositing the continuous organic filaments onto a conveyor belt to form a spunbond fiber web (70; taken to be a 1st web layer); hydroentangling the fiber web to open the fiber web at spaced apart locations; applying an adhesive to the opened fiber web; and then laminating a melt-blown barrier fabric (82; taken to be a 2nd web layer) onto the adhesive coated fiber web (col. 8 lines 35-67; col. 9 lines 4-15; col. 9 line 53 to col. 10 line 61; figures 1 and 8). Since the

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hydroentangled fiber web is opened at spaced apart location, it inherently forms a fiber web having a "*filament dispersion gradient*".

6. Claims 19 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Pike et al (US 6,352,948) as evidence from either (Jackson et al (US 5,952,251) or Austin et al (US 5,144,729)). This rejection is made as an alternative to numbered paragraph 5, if the term "reinforcing" filament/strand is taken to patentably distinguish over an organic filament/strand.

Although not explicitly disclosed, reinforcing filaments/strands are taken to reads on spunbond and/or melt-blown filaments/fibers taught by Pike et al, because these filaments/fibers are capable of being use as a reinforcing material as evidence from teachings of Jackson et al (col. 8 lines 55-61) or Austin et al (col. 6 lines 42-52).

7. Claims 17-21 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Neveu et al (US 5,252,397). See abstract; figure 5. Organic flax, hemp or ramie fibers are taken to be capable of being used as a reinforcing material.

8. Claims 17-21 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Neveu et al (US 5,252,397). See abstract; figure 5. thermoplastic fibers such as nylon, polyester, acrylic, aramid are taken to be capable of being used as a reinforcing material.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7115 for regular communications and (703) 305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

scy
October 19, 2002